

Paramedic Service Operational Key Performance Indicators 2021

Committee of the Whole

May 3rd, 2022



Background

- The purpose of this report is to provide an overview of a suite of operational key performance indicators (O-KPIs) collected by Kawartha Lakes Paramedic Service for the purpose of performance reporting to Council and the public.
- Including legislated (O. Reg 257) Response Time Performance Plan reporting
- The intent of O-KPIs is to provide the City and public a detailed view of the paramedic service operational efficiency and to provide benchmarking that will form the basis of ongoing evaluation and performance strategy.



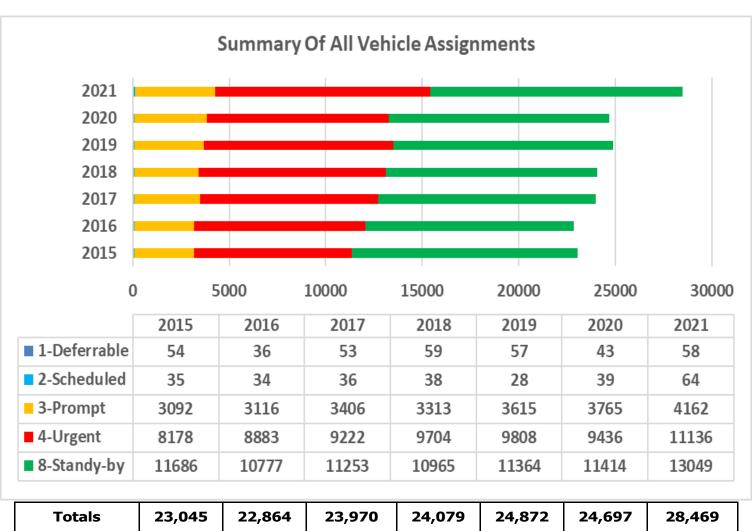
Background

- The Operational Key Performance Indicators described within this report consist of a combination of tradition and legislated measures (response time and call volumes) combined with a suite of performance metrics developed by the Paramedic Chiefs of Canada (PCC).
- In Ontario, there are very few sources of comparators data for paramedic service performance and benchmarking. The Municipal Benchmarking Network (MBN www.mbncanada.ca) does include six Emergency Medical Services measurements and where applicable this data is included for comparison.

Call Volume – Vehicle Assignments



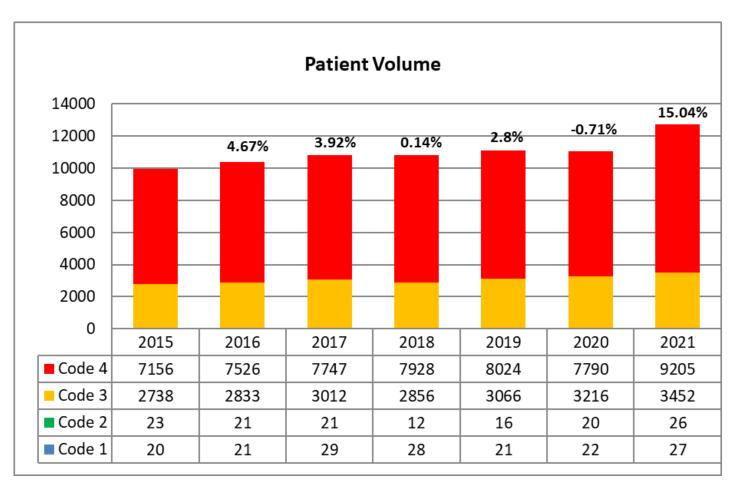
- Code 4 Urgent/life threatening calls increase of 18.02%
- Code 3 –
 Prompt/Serious calls increase of 10.54%
- There was an overall increase of 15.27%
- The average year over year increase for the reporting period 3.73%



Patient Call Volume



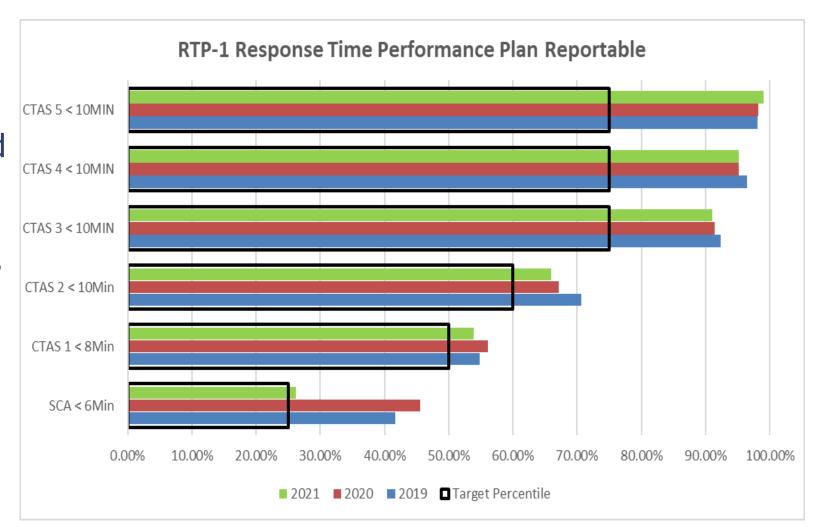
- 2021 to increase in service demand with an unprecedented rate of 15.04%.
- The seven-year average rate of increase is 4.31%.



Response Time Performance



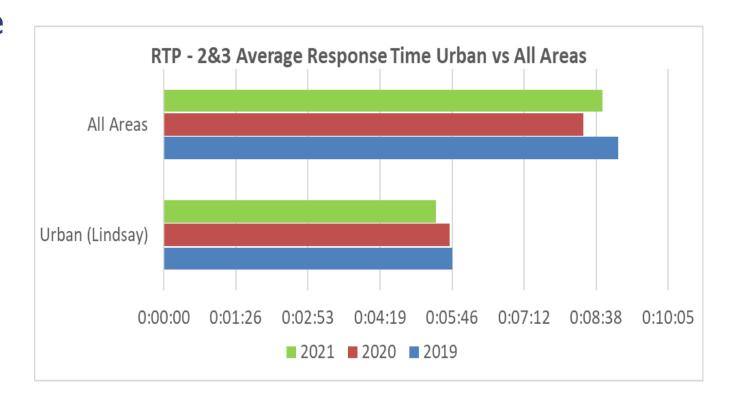
- Council approved Response Time
 Performance Plan
- Reviewed and reported annually as mandated by the Reg. 257
- Performance continues to exceed all targets although with some deterioration of performance over the previous year.



Average Response Time Urban vs All Areas



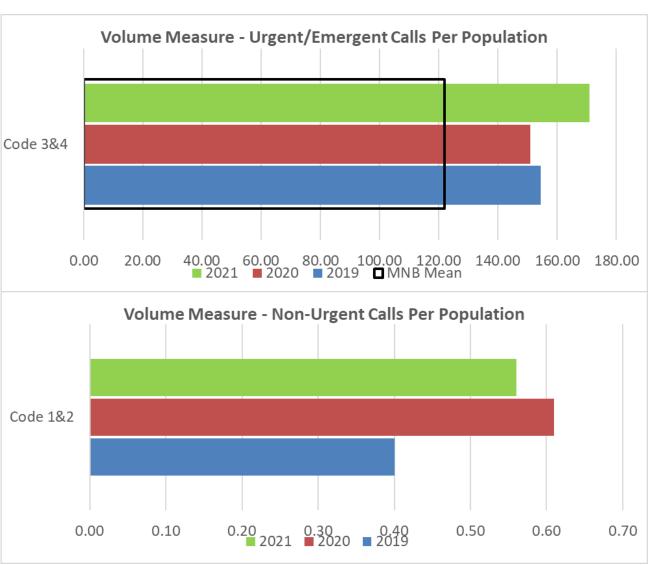
- Response times performance in the urban setting exceeds the performance in the rural areas as does the concentration of call volume.
- Response times in Lindsay improved in 2021, over all response time average increased as compared to 2020



Volume Measures – Per Capita



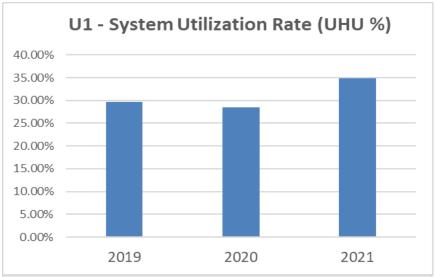
- Emergency responses per capita significantly increased in 2021 at 171/1000 population.
- MBN mean EMS demand for service at 122/1000 population.
- Non-urgent call volume remains very low.

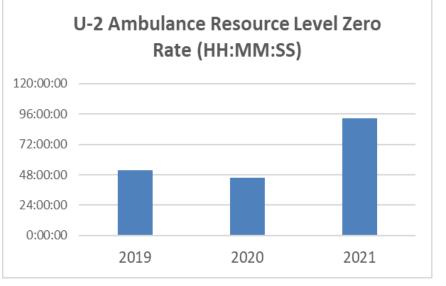


Utilization Measures

- Unit hour utilization rate at 35%.
- Does not capture productivity outside of responding to emergency calls, such as the completion of required documentation cleaning, restocking, etc.
- Resource Level Zero (calls for service exceeding deployed resources 92 hours 20 minutes.



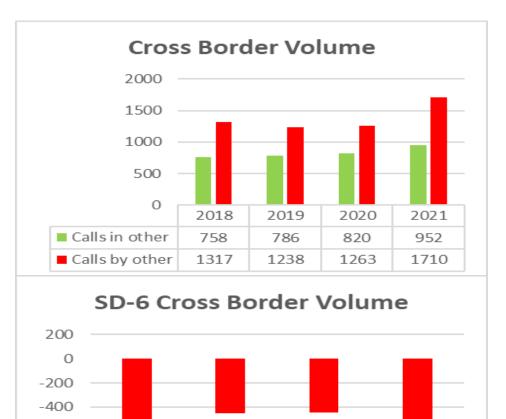




Cross Border Volumes



- Volume of paramedic service responses within the City of Kawartha Lakes completed by other Municipality's ambulances against the volume of response by Kawartha Lakes Paramedics into external municipalities.
- Reliance on neighboring services has been increasing



2019

-452

2020

-443

2021

-758

-600 -800 -1000

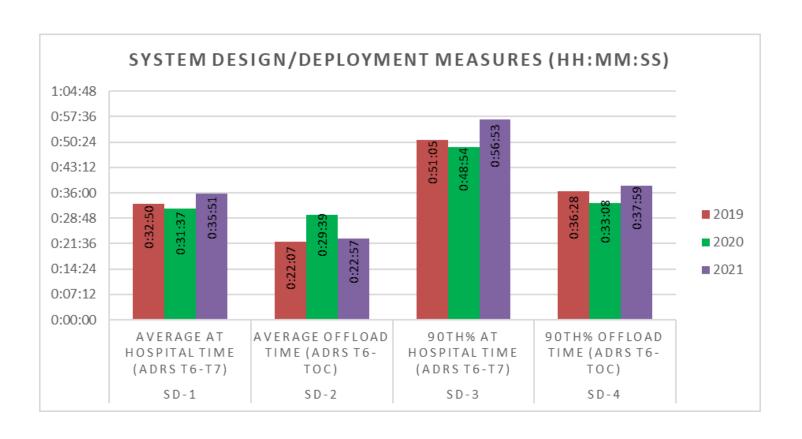
2018

-559

Ambulance Hours Lost In-Hospital



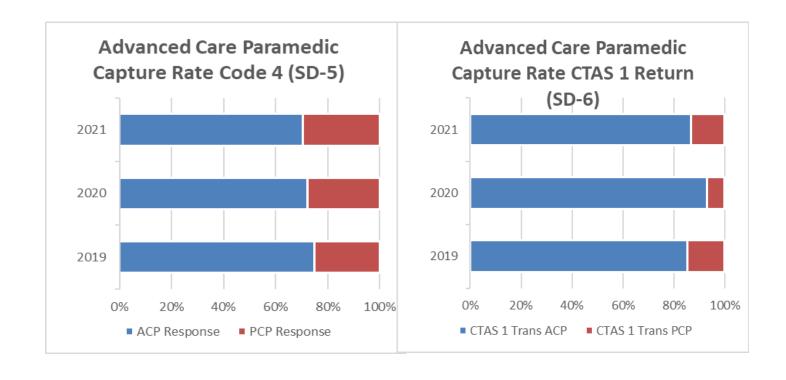
- Paramedic in-hospital times increasing in 2021
- Frequency of ambulance offload delay increasing (time of arrival to transfer of care > 30 minutes)
- Total offload time (>30 Min) 726:20:32



Advanced Level of Care Capture Rate



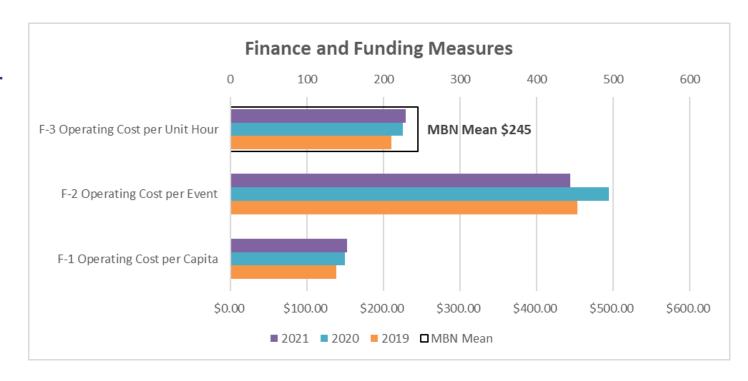
- Percentage of emergency responses that received Advanced Care Paramedic response vs Primary Care Paramedic (PCP).
- The strategy of the City of Kawartha Lakes to maintain a 50% ACP:PCP ratio has resulted in superior performance in this measurement.



Finance/Funding Measures



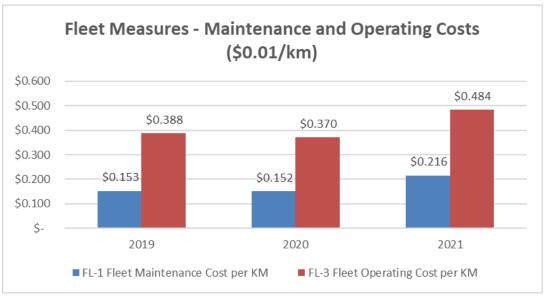
- Increasing call volumes, inflation and equipment costs resulting in increased costs per unit hour and per capital over the previous year rates.
- The unit hour cost increased by 1.77% to \$229.05/uh which remains lower than the MBN comparator (\$245.00) and at a rate of increase well below the 2021 annual average CPI increase (3.4%).

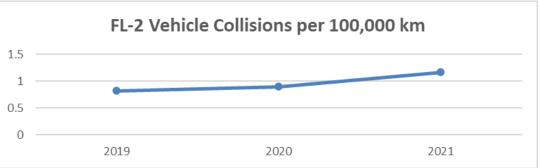


Finance/Funding Measures

- Total fleet operating costs increased by \$0.114 per kilometer in 2021 over 2020 with total per kilometer operating cost at \$0.484/km in 2020 over 2020 at \$0.37/km.
- Influencing factors related to this performance measure include significant fuel cost increases in 2021 (24% average price increase) and several significant vehicle repairs.
- Incidents/collision instance rate of 1.17 per 100,000 kms. The department will be examining this trend to seek opportunities to improve.



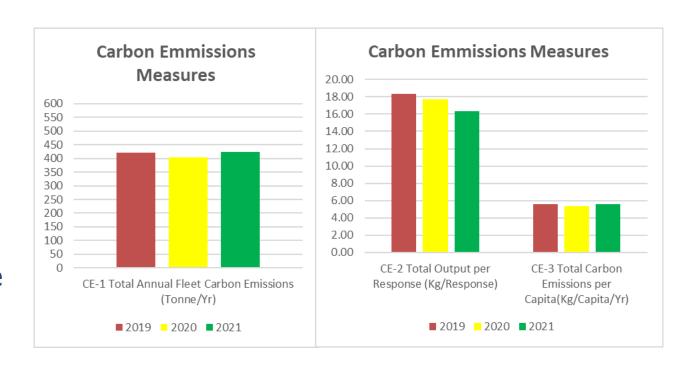




Carbon Emissions Measures



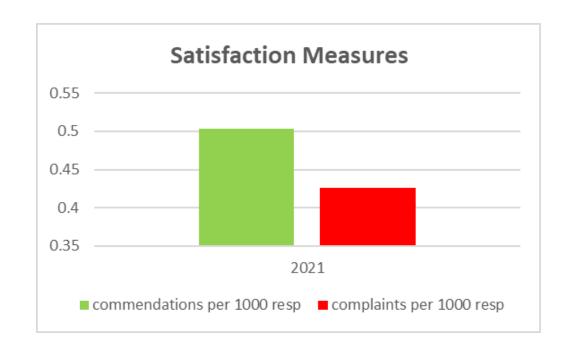
- Annual Fleet Carbon Emissions and Carbon Emissions per Capita measures increased in 2021 over 2020. (increased mileage travelled by the fleet as call volume increases).
- Additional influencing factors include fleet age/fuel efficiency, vehicle model and size.



Satisfaction Measures



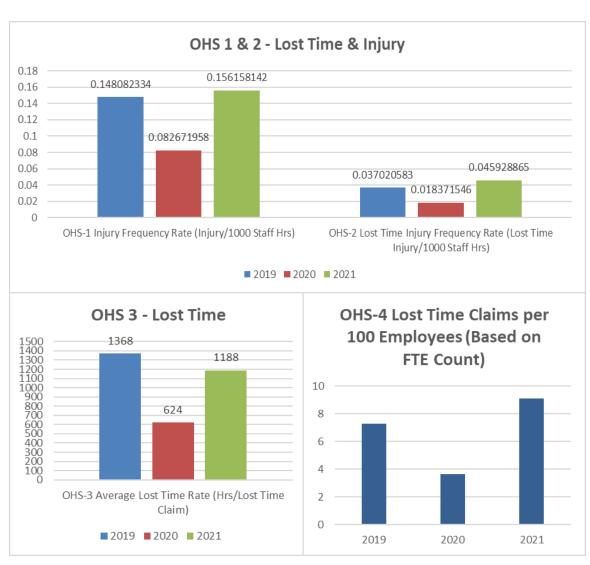
- Passive approach of a comparison of commendations vs complaints received as a result of service provided.
- Additional measures to qualify service delivery expectation and performance will be added in 2022.



Occupational Health & Safety



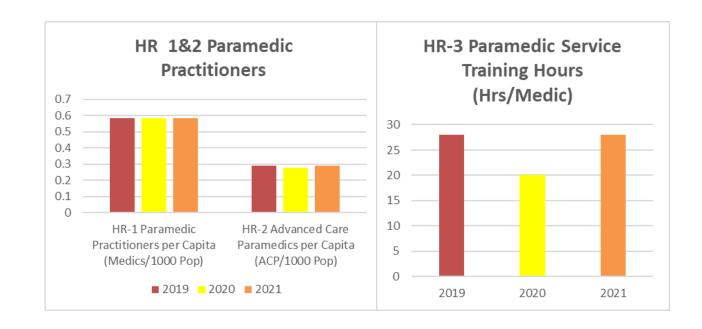
- Frequency Rate for Injury and Lost Time Incidents remains lower than many comparators, however the average lost time hours per claim is very high.
- This metric warrants further analysis to identify causes and opportunities for improvement and mitigation.



Human Resource Measures



- Service staffing levels have remained consistent over the KPI reporting period.
- Call volumes have continued to rise resulting in significant increases in utilization rates and increasing Resource Level Zero Rates
- Reduction of Paramedic Continued Education hours during due to the pandemic. The department was able to provide typical training through transition to alternate training methods in 2021.



Key Findings



- 1. Demand for Service & Resource Level
 - a. Increasing at unprecedented rate
 - b. Frontline staffing levels have remained unchanged
 - c. Resource Utilization Rates approaching maximum
 - d. Resource Level Zero Rates increased
 - e. Reliance on cross border service increasing
- 2. Financial Performance
 - a. Per capita cost increase below annual CPI and remains below Municipal Benchmarking Network comparator mean.
 - b. Fleet costs increasing concurrent with service demand and increasing fuel costs.
- 3. Human Resources
 - a. Loss time injury rates require attention
 - b. High quality level of care is consistently provided to the community

Key Findings



4. Fleet

- a. Fleet operational cost likely to exceed current budget expectations due to high fuel and maintenance costs
- b. Safety measures need to be considered to decrease vehicle incident frequency
- c. Strategies are required to reduce emissions

5. Stakeholder Satisfaction

a. Meaningful measures should be developed to qualify service delivery expectation and performance



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